# NATIONAL WEATHER SERVICE

PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)

TYPE: Official Product DATE: April 24, 2003

## VOLCANIC ASH ADVISORY

# Part 1 - Mission Connection

## 1. Product/Service Description:

The Volcanic Ash Advisory (VAA) is an alphanumeric product providing observational information on volcanic eruptions, and observational and forecast information on the vertical and horizontal extent of airborne volcanic ash. The NWS Alaska Aviation Weather Unit (AAWU) operating as the Anchorage Volcanic Ash Advisory Center (VAAC) prepares this product regularly, updated as required, during a volcanic eruption and/or ash event affecting the Anchorage Flight Information Region (FIR) and for areas of the Russian Federation north of 60 degrees north latitude and east of 150 degrees east longitude. The NESDIS Satellite Analysis Branch and NWS NCEP Senior Duty Meteorologist (SDM) operate cooperatively as the Washington VAAC to issue this product for CONUS, the Oakland FIR over the Pacific Ocean, the New York FIR over the Atlantic Ocean, the Caribbean, Central America, and South American north of 10 degrees south latitude.

# 2. Purpose/Intented Use:

The Volcanic Ash Advisory is provided for the protection of life and property as well as mitigating economic losses resulting from a volcanic ash event. The VAA is issued to alert and advise Meteorological Watch Offices (MWO) of potential volcanic ash hazards, and to provide the MWO with ash location and forecast information needed to issue a volcanic eruption or ash SIGMET. The VAA also alerts en route aviation interests, air traffic flight control, aviation dispatch, NWS and FAA operational units and other aviation interests to the short term volcanic ash hazard, as well as advising on the long term volcanic ash hazard potential. In addition the VAA provides information to offices providing public and marine information to assist in the formulation of actions to alert ground based interests.

## 3. Audience:

The target audience for the product includes: Meteorological Watch Offices, general and commercial aviation, and military and government agencies.

#### 4. Presentation Format:

The VAACs provide the product in an alphanumeric format and prepare them in a consistent manner. Refer to NWS policy document:

http://www.nws.noaa.gov/directives/010/pd01008d.pdf and NWS instruction 10-811: http://www.nws.noaa.gov/directives/010/pd01008011a.pdf.

#### 5. Feedback Method:

The NWS is constantly seeking to improve its products based on user feedback. Customers can provide continuous feedback through e-mail links to the local program managers at the AAWU Anchorage VAAC and the SAB/NCEP Washington VAAC and via the offices Internet web sites. They also can contact, via e-mail links, the volcanic ash program manager at

the NWS Alaska Region headquarters. The Alaska Aviation Weather Unit, the NWS Alaska Region and NWS Headquarters also obtain feedback through meetings with interested aviation interests, FAA, military and other government agencies and through Customer Surveys.

Technical and policy questions, and comments for the Volcanic Ash Advisory may be addressed to:

National Weather Service
Attn: Bill Alexander
Volcanic Ash Program Manager
222 West 7th Avenue #23 Room 517
Anchorage, Alaska 99513-7575
or e-mail questions and comments to: Bill.Alexander@noaa.gov

# Part 2 - Technical

#### 1. Format and Science Basis:

The Anchorage and Washington VAACs disseminate the VAA in an alphanumeric format. The format conforms to recommended practices under the International Civil Aviation Organization (ICAO), Annex 3 - Meteorological Service for International Air Navigation. These offices prepare a VAA based on interpretation of satellite imagery, radar imagery, volcanic ash dispersal models, information from volcano observatories, and surface and pilot observations.

# 2. Availability:

The Anchorage and Washington VAACs disseminate the VAA every six hours on a non-scheduled basis with additional updates disseminated as required at any time. The product is disseminated via the Internet, family of services, and NOAA port. Additional information on Aviation product dissemination is available at:

http://www.aviationweather.gov.

The following WWW Internet sites are locations to access the VAA product: Anchorage VAAC: http://www.ssd.noaa.gov/VAAC/OTH/AK/messages.html Washington VAAC: http://www.ssd.noaa.gov/VAAC/messages.html.

## 3. Additional Information:

A description of the Volcanic Ash Advisory policy, area of responsibility, abbreviations and definitions, standards and guidelines, and means of product dissemination is located in NWS Instruction 10-811 which is available via the Internet at:

http://www.nws.noaa.gov/directives/010/operation\_services.htm.